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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,759	08/04/2003	Theodore R. Flint	D4699-00059 (500-97)	5329

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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/633,759

**Applicant(s)**

FLINT ET AL.

**Examiner**

Robert Sellers

**Art Unit**

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,10,11,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,10,11,14 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)          |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. <u>20060830</u> .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

Attachment to the Interview Summary, Form PTOL-413

1. Independent claims 1 and 10 newly limited to a “non-sensitizing” liquid epoxy resin along with the non-sensitizing mercaptan composition does not distinguish over the closest prior art to Jorissen et al. Patent No. 5,548,026; Japanese Patent Nos. 1-249828, 2-108533, 61-138232 and 61-185526, and Miyamoto et al. Patent Publication No. WO 2004/0006944 and Yamamoto Patent No. 6,770,957, each of which recites the equivalent components of a liquid epoxy resin and a polymeric mercaptan. There is no evidence of record distinguishing the dermal reactions measuring contact sensitization (specification, page 4, paragraph 15 to page 6, paragraph 23) of a composition representative of the claims as compared to the closest prior art examples in the references. The amount of liquid epoxy resin, the equivalent ratio of epoxy groups of the epoxy resin to the active hydrogen groups of the curing agent, and any other additives should be held constant to isolate the effect of the claimed liquid epoxy resin and mercaptan composition vs. the closest prior art liquid epoxy resin(s) and curing agent(s).

2. The evidence must be commensurate in scope with the claims regarding a representative sampling of species falling within the broadly claimed liquid epoxy resin (unless the limitations of claims 6 and 15 limited to a sorbitol polyglycidyl ether are incorporated into independent claims 1 and 10, respectively) and mercaptan composition (unless limited to the shown species of polyether polymeric mercaptan in Example 1 on page 3, line 4 of the specification).

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3. The following is deemed to be the closest prior art examples:

Jorissen et al.	sorbitol polyglycidyl ether + dicyandiamide (e.g., col. 11, Working Example 2)
JP 1-249828	bisphenol A diglycidyl ether + pentaerythritol tetra(3-mercaptopropionate (CAPLUS accession no. 1990 :181633, EH 316, registry no. 7575-23-7)
JP 2-108533	epoxy resin + polyamideamine + Polymercaptan
Miyamoto	Plastic Parts Putty 8108, 3M (page 6, paragraph 80, lines 7-9)
JP 61-138232	epoxy resin + dithioterephthalic acid
Yamamoto	dihydroxynaphthalene diglycidyl ether homopolymer + triglycidyl p-aminophenol polymer + thermoplastic-coated imidazole (col. 4, Examples, HP4032 + EP630 + HX3921, respectively)

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JP 61-185526

bisphenol A epoxy resin + polythiol

Since the epoxy resin for JP's 2-108533 and 61-138232 are unidentified, a conventional bisphenol A diglycidyl ether can be tested. The polymercaptan and polythiol for JP's 2-108533 and 61-185526 are also not named, so a conventional species can be utilized. The conventionality of the tested polymercaptan or polythiol must be established by documentation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).



Robert Sellers  
Primary Examiner  
Art Unit 1712

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This is responsive to the Request for Continued Examination filed July 12, 2006.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 5, 6, 10, 11, 14 and 15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed.

4. There is no support for the broadly claimed liquid epoxy resin being characterized as "non-sensitizing." According to page 4, line 25, the mercaptan composition is non-sensitizing. The sole basis for the epoxy resin being non-sensitizing is if it is confined to the sorbitol polyglycidyl ether of claims 6 and 15 as described on page 4, lines 22-23.

5. The 35 U.S.C. 102(b) rejection over Jorissen et al. Patent No. 5,548,026 has been overcome by the newly claimed consistency of the composition as a putty. Jorissen et al. does not identify any form for its blend of a first part of from 1 to 25 wt% of sorbitol epoxy resin (col. 4, line 63 to col. 5, line 15), a curing agent such as a polymercaptan (col. 6, line 40) and a pigment such as titanium dioxide or carbon black (col. 9, lines 56-57).

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The text of section 103(a) of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 5, 6, 10, 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorissen et al. Patent No. 5,548,026; Japanese Patent No. 2-108533, Miyamoto Publication No. 2004/0006944, Japanese Patent No. 61-138232, Yamamoto Patent No. 6,770,957 and Japanese Patent No. 61-185526.

6. The rejection has been modified by the inclusion of Jorissen et al. as both a primary and secondary reference. Jorissen et al. does not recite the claimed putty consistency of the composition. Japanese '828, '533 and Miyamoto establish the formation of a blend of a liquid epoxy resin and polymercaptan as a putty. It would have been obvious to prepare the composition of Jorissen et al. as a putty as taught by Japanese '533 and Miyamoto in order to facilitate the application of the adhesive to substrate(s). Otherwise, the rejection is maintained for the reasons of record set forth in the non-Final rejection mailed September 30, 2006 and the Final rejection mailed January 13, 2006.

Claims 1, 2, 5, 6, 10, 11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 1-249828 in view of Jorissen et al.

The rejection is maintained for the reasons of record set forth in the non-Final and Final rejections.

The arguments filed July 12, 2006 have been considered but are unpersuasive.

7. The references applied hereinabove disclose mixtures of liquid epoxy resins and polymercaptans without any indication as to causing skin irritation (i.e., being sensitizing). Based on the equivalent components of the prior art and claims, the formulations of the patents are inherently non-sensitizing in the absence of a showing of sensitization upon a comparison with the claimed composition. The requirements for proper empirical comparisons are espoused in the attachment to the Interview Summary included herewith.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Robert Sellers  
Primary Examiner  
Art Unit 1712